

MINEYEV, Yu., inzh.; KARPOV, B., inzh.

Anchor arrangements on vessels with underwater wings. Rech.  
transp. 21 no.1:45-46 Ja '62. (MIRA 16:8)

(Anchors)

1. KARFOV, E. A.
2. USSR (600)
4. Machine-Shop Practice
7. Making individual non-hardened templets for the assembly of various devices.  
Stan. i instr. 24, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

KARPOV, B.A.

Effect of the active reaction of the medium on the difference of  
the potentials of the musculus gastrocnemius in a frog. Trudy  
Semipal. med. inst. 2:129-131 '59. (MIRA 15:4)

1. Ispolnyayushchiy obyazannosti zaveduyushchego kafedroy fiziki  
semipalatinskogo gosudarstvennogo meditsinskogo instituta.  
(MUSCLES--MOTILITY)

LURIYA, A.R. (Moskva); KARPOV, B.A. (Moskva); YAREBUS, A.L. (Moskva)

Disorders in the perception of complex visual objects under the influence of lesions of the frontal lobes. Vop. psikhol. 11 no.3:45-54  
My-Je '65. (MIRA 18:7)

Karpov, B. D.

U.S.S.R.

The effect of small concentrations of methyl methacrylate vapors on the inhibition and stimulation processes of the cortex of the brain. B. D. Karpov. *Trudy Leningrad. Gos. Univ.*, Med. Sci. Ser. (1953); 41: 150-154. 42, 34455. -- Studies were made on 70 workers (men and women, 68 of whom were between 30 and 39, and 12 between 40 and 50 years old) exposed 4-8 years to the fumes of methyl methacrylate (I). Symptoms of irritability, dizziness, somnolence, headache, loss of appetite, and drop in blood pressure at the end of the work shift were observed. These symptoms are probably the result of a disturbance of the dynamic equil. in the cortex of the brain caused by the irritation of vapors of I. White mice were subjected to control expts., and the disturbance of the dynamic equil. manifested itself in a release of the internal inhibition processes and a depression of the stimulation processes. Emanuel Merdinger.

LAZAREV, N.V.; ALEKSANDROV, I.S.; LYUBLINA, Ye.I.; AKKERBERG, I.I.; ZAKA-  
BUNINA, M.S.; GADASKINA, I.D.; DOBRYAKOVA, N.S.; KREPS, I.F.; KARASIK,  
V.M.; LEVINA, E.N.; DANISHEVSKIY, S.L.; YEGOROV, N.M.; RYLOVA, M.L.,  
starshiy nauchnyy sotrudnik; KAMPOV, B.D.; ANDREYEV, V.V.; LYKHINA,  
Ye.T.; ZAMESHAYEVA, G.I.; ANISIMOV, A.N.; FRIDLYAND, I.G.; DANETSKAYA,  
O.L.; BOGOVSKIY, P.A.; TIUNOV, L.A.; MIKHEL'SON, M.Ya.; ABRAMOVA, Zh.I.,  
GRIGOR'YEVA, L.M.; KLINSKAYA, K.S.

Third Leningrad conference on the problems of industrial toxicology.

Farm. i toks. 16 no.2:59-62 Mr-Ap '53.

(MLRA 6:6)

(Poisons)

KARPOV, B.D.

Methyl methacrylate from the viewpoint of labor hygiene. B. D. Karpov (Leningrad Seint. Hyg. Med. Inst.). *Gigiena i Sanitariya*, No. 10, 25-8; cf. C.A. 48, 13984d. The minimum dose of Me methacrylate that shows a reaction in rabbits is 0.25 mg./l. and the lethal concn. for white mice is 13.1 mg./l. The symptoms of poisoning rise rapidly with increase of vapor concn. Irritation of mucous membrane in human beings occurs at 0.5-1.0 mg./l. and odor detection is possible at 0.13-0.25. Excitation is induced in mice at 5-7 mg./l. Me methacrylate causes microhemorrhages in the internal organs and blocks the normal processes of stimulation in the cerebral cortex. In human subjects it lowers the blood pressure. The tolerance for industrial establishments of 0.05 mg./l. is suggested. G. M. K.

KARPOV, B. D.

Toxicity of methyl acetate. B. D. Karpov (Med. Inst.  
Sverdlovsk, Leningrad). Parasitology, No. 1,  
10-61 (1954). — Acute poisoning of mice with  $\text{MeOOCCH}_3$ .  
 $\text{CH}_3$  vapor affects respiration first, then nerve functions.  
Symptoms include extravasation of blood and degenerative  
changes in various organs. Local applications of liquid  
 $\text{MeOOCCH}_3$  cause dermatitis or conjunctivitis. In  
man, respiratory mucosae may be irritated when the vapor  
concn. reaches 0.25 mg./l. Julian P. Smith.



Karpov, B. D.

AID P - 2628

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 5/22

Author : Karpov, B. D., Kand. Med. Sci.

Title : ~~On the toxicological evaluation of the methyl ester of acrylic acid~~  
On the toxicological evaluation of the methyl ester of acrylic acid

Periodical : Gig. i san., 8, 19-22, Ag 1955

Abstract : A study of the harmful effects of the methyl ester of acrylic acid which is used in many industries and will be widely used in plastics production. The respiratory system, eyes and skin of workers must be well protected. The maximum concentration permissible in workshops is indicated. Table. 10 refs., 1940 - 1951.

Institution : Chair of Industrial Hygiene, Leningrad Medical Institute of Sanitation and Hygiene

Submitted : Mr 8, 1954

1961, 1971  
"Data on the Toxicological Characteristics of Methylchloroacrylate,"  
by B. D. Karpov, Candidate of Medical Sciences, Chair of Labor  
Hygiene, Clinic of Occupational Diseases, Leningrad Sanitary-  
Hygiene Medical Institute, Gigiyena i Sanitariya, Vol 22, No 4,  
Apr 57, pp 74-76

The work reports the results of investigations and experiments which established that the vapors of methylchloroacrylate--the methyl ether of alphachloroacrylic acid--are toxic to man and animals. Chemically pure methylchloroacrylate is a clear, mobile liquid with a specific gravity of 1.19; it is readily soluble in organic solvents and in water up to concentrations of one percent; it boils at a temperature of 44° degrees. It is usually found in industrial premises where the chemical is synthesized and polymerized. Significant pathologic anatomical changes were found in animals which had died as a result of having been exposed to the vapors of the compound. The limit of allowable concentrations of methylchloroacrylate vapors in the air was established at 0.005 milligram per liter. (U)

KARPOV, E. D.

"Methyl esters of methacrylic, acrylic, and alphachloroacrylic acids as industrial toxins."

report submitted at 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

KARPOV, Boris Dmitriyevich; KARPOVA, Nadezhda Ivanovna; SHAGAN, I.B.,  
red.; LEBEDEV, G.T., tekhn. red.

[Work hygiene in the plastics industry (laminates)] Gigena  
truda v proizvodstve plasticheskikh mass; sloistye plastiki.  
Leningrad, Medgiz, 1962. 30 p. (MIRA 15:9)  
(Plastics industry—Hygienic aspects)

KARPOV, Boris Dmitriyevich; ZYATYUSHKOV, A.I., red.; LEBEDEVA,  
G.T., tekhn. red.

[Work hygiene in industrial painting] Gigiena truda pri  
maliarnykh rabotakh. Leningrad, Medgiz, 1963. 38 p.  
(MIRA 16:11)

(Painting, Industrial--Safety measures)

KARPOV, B.D.

Toxicological characteristics of perfluoroisobutylene.  
Trudy LSGMI 75:221-230 '63. (HIRA 17:4)

1. Kafedra gigiyeny truda s klinikooy professional'nykh  
zabolevaniy (zav. kafedroy - prof. Ye.TS. Andreyeva-  
Galanina) Leningradskogo sanitarno-gigiyenicheskogo me-  
ditsinskogo instituta.

KARPOV, B.D.

Materials on the toxicology of chronic action of freon-22.  
Trudy ISGMI 75:231-240 '64.

Lethal and liminal (threshold) concentrations of freons.  
Ibid.:241-249 (MIRA 17:4)

KARPOV, B.I., inzhener.

Possible errors of the apparatus for measuring heat flow constructed by the Leningrad Technological Institute of the Refrigeration Industry. Trudy LTIKHP 11:74-82 '56. (MLBA 10:6)

1. Kafedra kholodil'nykh ustanovok.  
(Measuring instruments) (Heat--Measurement)



AUTHOR: Karpov, B. (Engineer)

66-2-6/22

TITLE: Calibration and operation of heat flow meters. (Graduirovka i ekspluatatsiya izmeriteley teplovykh potokov).

PERIODICAL: "Kholodil'naya Tekhnika" (Refrigeration Engineering) 1957, No.2, pp.29 - 35 (USSR).

ABSTRACT: Heat flow meters designed by the Leningrad Technological Institute of the refrigeration industry are being widely used. This instrument has been described in detail by Alperovich, Z.Z. in 1938 (1) and it is convenient for investigating the insulating structures of refrigerators. The instrument consists of a rubber disc which is glued on to the surface to be tested. Under steady state conditions an equal heat flux passes through the instrument and the structure, which is determined on the basis of the temperature difference measured by means of thermocouples, the junction points of which are located on the opposite sides of the active layer of the rubber disc. This instrument is used extensively in the Soviet Union. In some experiments of the author of this paper doubtful results were obtained and therefore it is considered advisable to evaluate the possible measuring errors of this instrument under various conditions of operation. Of all the errors the most

Card 1/4

Calibration and operation of heat flow meters. (Cont.)

important are: the error occurring during calibration and the error during non-steady state temperature conditions of the investigated structure. It is to the analysis of these errors that this paper is devoted. For better calibration a new instrument was developed, shown in Figs. 1 and 2, which permits calibration at heat flows of 5 to 50 cal/m<sup>2</sup> hour in the temperature range -20 to 30 C; it is thereby possible to maintain heat flow whilst changing the temperature and also changing the heat flow at a constant temperature. The set up consists of a multi-layer plate of 1050 x 1050 mm, reliably insulated at its ends. At the top, a constant positive temperature near to 0°C or a negative temperature is established by means of aqueous or eutectic ice submerged in a tank, whilst at the bottom the required positive temperature is maintained. At the top and at the bottom of the plate the metering units to be calibrated are placed inside appropriate holes in the rubber plates. These metering units are subjected to the effect of the same flow but at sharply differing temperatures. The main component is a hollow paraboloid at the lower surface of the insulation in the focus of which a heating unit is placed, thus ensuring a uniform flow of

Card 2/4

Calibration and operation of heat flow meters. (Cont.)

parallel heating rays. The temperature gauges<sup>66-2-6/22</sup> are connected to an unbalanced bridge in which the unbalance current controls the heating of one of three heating units in the flow surrounding the outside surface of the paraboloid. The applied set up permits eliminating the temperature gradient between the inside and the outside surface of the paraboloid with an accuracy of up to 0.03 C. Test results and operation of this metering unit are discussed in detail. It is concluded that the flat instrument used for calibrating heat flow meters requires thorough checking that there is no heat exchange between the active and the protective zones. The constant of the meter does not depend on the heat flow but is a linear function of the temperature and it is therefore possible to calibrate the meters in a single temperature range and to derive data for other temperature ranges by simple linear extrapolation. Such meters are very sensitive to even insignificant changes of the surrounding temperature, which may result in erroneous indications. In testing insulation structures it is necessary to aim at a maximum stability of the air temperature in the room where the instrument is fitted and to provide automatic recording of the measured values. Readings during periods with single disturbances in the temperature

Card 3/4

Calibration and operation of heat flow meters, (Cont.)  
should be disregarded. When investigating structures with  
a reduced thermal stability it is necessary to effect auto-  
matic recording of the readings and to continue the mea-  
surements for several days.

There are 6 figures and 7 Slavic references.

Card 4/4

SOV/124-58-7-7832 D

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 74 (USSR)

AUTHOR: Karpov, B.I.

TITLE: Investigation of the LTIKhP-type Heat-flow Meters (Issledovaniye izmeriteley teplovykh potokov konstruktssii LTIKhP)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Leningr. tekhnol. in-t kholodil'n. prom-sti (Leningrad Institute of Industrial Refrigeration Technology), Leningrad, 1958

ASSOCIATION: Leningr. tekhnol. in-t kholodil'n. prom-sti (Leningrad Institute of Industrial Refrigeration Technology), Leningrad

1. Heat--Measurement 2. Flowmeters--Analysis

Card 1/1

KARPOV, B., kand.tekhn.nauk

Thermal stability of the outer walls of cold storage warehouses.  
Khol.tekh. 37 no.1:29-32 Ja-F '60. (MIRA 13:5)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy  
promyshlennosti.  
(Cold storage--Insulation)

KURYLEV, Yevgeniy Sergeyevich; GERASIMOV, Nikolay Aleksandrovich. Prinsipal  
uchastiye SURENKOV, S.I.; SHEFFER, A.P., kand. tekhn. nauk, retsen-  
zent; KARPOV, B.I., kand. tekhn. nauk, red.; SIMONOVSKIY, N.Z., red.  
izd-va; ONISHCHENKO, R.N., red. izd-va; PETERSON, M.M., tekhn. red.

[Refrigerating units] Kholodil'nye ustanovki. Moskva, Mashgiz, 1961.  
607 p. (MIRA 14:12)

(Refrigeration and refrigerating machinery)

BUGRO, F.Ye., inzh.; YEVTUSHENKO, V.V., inzh.; KARPOV, B.P., inzh.

Waterproof quick-setting concrete for the reinforcement of vertical shafts in mines. Shakht.stroi. 6 no.11:13-14 N '62. (MIRA 15:12)

1. Pechorskiy nauchno-issledovatel'skiy ugol'nyy institut.  
(Mine timbering) (Concrete)



KAPEL'SON, L.M., inzh.; KARPOV, B.S., inzh.

Study of the operation of a conical ball mill grinding anthracite  
culm. Teploenergetika 9 no.12:9-13 D '62. (MIRA 16:1)

1. Gosudarstvennyy trest po organizatsii i ratsionalizatsii  
rayonnykh elektrostantsiy i setey.  
(Milling machinery) (Coal, Pulverized)

KARPOV, D.T., inzhener.

Useful manual ("Principles of designing engineering  
installations on launches" by A.M. Radov. Reviewed by  
D.T. Karpov. Sudostroenie 22 no.10:44 O '56.

(MLRA 10:2)

(Launches) (Radov, A.M.)

KARPOV, D.T.; BERMAN, E.M., red.; PITERMAN, Ye.L., red. izd-vn.; BACHURINA,  
A.M., tekhn. red.

[LM 4-87 cutter for service and travel; "Lumber industry and  
forestry" pavilion] Sluzhebno-raz"ezdnoi kater LM 4-87; pavil'on  
"Lesnaia promyshlennost' i lesnoe khoziaistvo." [Moskva] M-vo  
lesnoi promyshl. SSSR[1957] 13 p. (MIRA 11:11)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka.  
(Launches)

LAZAREV, Valentin Afanas'yevich; MANZHOS, Yu.A., inzh., retsenzent; KARPOV,  
D.T., inzh., retsenzent; YEMEL'YANOV, Yu.V., nauchnyy red.; SMIRNOV,  
Y.I., red.; FRUMKIN, P.S., tekhn. red.

[Automobile engines in launch building] Avtomobil'nye dvigateli v  
katerostroenii. Leningrad, Gos. soiuзное izd-vo sudostroit.pro-  
myshl. 1961. 258 p. (MIRA 14:6)  
(Marine engines) (Automobiles--Engines)

KARPOV, D.V.

Certain considerations in selecting a system of gas supply for  
industrial enterprises. Gaz.prom. 5 no.2:20-24 F '60.  
(MIRA 13:6)

(Gas distribution)

KARPOV, D.V.

"Safety techniques applied to the use of gas fuel in industry" by  
M.A. Nechaev. Reviewed by D.V.Karpov. Gaz.prom. 5 no.8:52 Ag '60.  
(MIRA 13:10)

(Gas as fuel--Safety measures)  
(Nechaev, M.A.)

KARPOV, Dmitriy Vasil'yevich; GLOZSHEYN, Ya.S., nauchnyy red.;  
DESHALYT, M.G., ved. red.; YASHCHURZHINSKAYA, A.B.,  
tekhn. red.

[Operation of industrial furnaces by gas fuel] Eksplua-  
tsiia promyshlennykh pechei na gazovom toplive. Lenin-  
grad, Gostoptekhnizdat, 1963. 118 p. (MIRA 16:7)  
(Furnaces) (Gas as fuel)

*KARPov, Florya*

RUMANIA / Chemical Technology. processing of Solid Fuels

H-22

Abs Jour : RZhKhim., No 12, 1958, No 40941

Author : Dima, D'yakonesku, Karpov, Florya

Inst : Acad. RPR

Title : Preparation of Sulfur Containing Coals from Rumanian Coals

Orig Pub : Studii si cercetari stiint., Acad. RPR, Fil. Jasi. Chim.,  
1956, 7, No 1.

Abstract : A study was made on the preparation of sulfur containing coals (SC), through the use of 95% sulfuric acid on peat, lignite, coal, and brown coal. To sulfonate old coals, a temperature of 175-200°C for 4-5 hours was needed; to sulfonate peat and lignite, 7 hours at 100-150°C. The amount of sulfuric acid is approximately 500%, of the coal weight. The ion-exchange capacity of prepared SC, expressed in milliequivalents of CaO/lg. of the dry SC is 0.7-1.7 meq (working) or 0.2-2.2 meq (total). The SC coals containing alkaline or alkaline earth metals can be easily converted into the H-form by treatment with 3% HCl.

Card 1/1



KARPOV, G.K.; TUROVTSEV, N.I.; SAVEL'YEVA, O.I.

Studying the morphogenesis of generative buds in apple. Trudy TSGL  
7:173-178 '61. (MIRA 15:10)

(Buds) (Apple)

KARPOV, G. S.

"The Middle Carboniferous Along the Volga." Cand Geol-Min Sci, Saratov State  
U imeni N. G. Chernyshevskiy, Min Higher Education USSR, Saratov 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

KARPOV, G.S.

Some characteristics of the geological history of the Volga  
Valley portion of Saratov Province in the Bashkir age. Uch.  
zap.SGU 65:43-53 '59. (MIRA 16:1)  
(Saratov Province—Geology)

KARPOV, G.V.

Pinion shafts with changeable wobblers. Sbor.rats.predl.vnedr.v  
proizv. no.5:29 '60. (MIRA 14:8)

1. Magnitogorskiy metallurgicheskiy kombinat.  
(Rolling mills—Technological innovations)

KARPOV, F.A.,; ZHARKOV, A.V., agronom

Using flood lands for the cultivation of vegetables. Zemledelia 7  
no.5:42-53 Ky '59. (MIR: 12:7)

1. Direktor sovkhosa "Bol'shevik", Moskovskoy oblasti.  
(Vegetable gardening) (Alluvial lands)

KARPOV, Fedor Andreyevich [deceased]; ZHARKOV, Aleksandr Vasil'yevich;  
LEONOV, S., red.; POKHLEBKINA, M., tekhn. red.

[A vegetable "factory" of the Moscow region] Na podmoskovnoi  
fabrike ovoshchei. Moskva, Mosk. rabochii, 1962. 125 p.  
(MIRA 15:10)

(Serpukhov District--Vegetable gardening)

KARPOV, Fedor Fedorovich; DEMKOV, Ye.D., red.; DOLGOV, A.M., red.;  
YEZHKEV, V.V., red.; SMIRNOV, A.D., red.; USTINOV, P.I., red.;  
LARIONOV, G.Ye., tekhn.red.

[How to select the correct diameter of wires and cables]  
Kak vybrat' sечение проводов i kabeli. Moskva, Gos.energ.  
izd-vo, 1959. 47 p. (Biblioteka elektromontera, no.1)  
(MIRA 13:1)

(Electric conductors)

RYABKOV, Aleksandr Yakovlevich [deceased]; BOROVNIKOV, V.A.; KOSAREV,  
V.K.; KHODOT, G.A.; KARPOV, F.F., red.; BORUNOV, N.I., tekhn.red.

[Electric nets and systems] Elektricheskie seti i sistemy. Izd.4,  
perer. i dop. V.A.Borovnikovym, V.K.Kosarevym, G.A.Khodotom.  
Moskva, Gos.energ.izd-vo, 1960. 511 p. (MIRA 13:2)  
(Electric networks)



KARPOV, Fedor Fedorovich; DEMCOV, Ye.D., red.; DOLGOV, A.N., red.;  
YEZHKOV, V.V., red.; SMIRNOV, A.D., red.; USTINOV, P.I., red.;  
BOHUNOV, N.I., tekhn.red.

[How to test the possibility of connecting a short-circuited electric motor to an electric network] Kak proverit' vozmozhnost' podkliucheniia k elektricheskoi seti korotkozamknutogo elektrodvigatel'ia. Moskva, Gos.energ.izd-vo, 45 p. (Biblioteka elektromontera, no.12). (MIRA 14:3)

(Electric motors) (Electric power distribution)

KARPOV, Fedor Fedorovich; KOZLOV, Valer'yan Nikolayevich;  
KAMINSKIY, Ye.A., red.; SHIROKOVA, M.M., tekhn. red.

[Simple automatic control networks]Prosteishie skhemy avto-  
matizatsii. Moskva, Gosenergoizdat, 1962. 47 p. (Bibliote-  
ka elektromontera, no.67) (MIRA 15:9)  
(Automatic control)

KARFOV, Fedor Fedorovich; KOZLOV, Valer'yan Nikolayevich; VORONTSOV,  
F.F., red.; BORUNOV, N.I., tekhn. red.

[Designer's handbook on wires and cables]Spravochnik po ras-  
chetu provodov i kabelei. Moskva, Gos.energ.izd-vo, 1962. 176 p.  
(MIRA 15:8)

(Electric power distribution--Handbooks, manuals, etc.)

(Electric cables--Handbooks, manuals, etc.)

(Electric lines--Handbooks, manuals, etc.)

KARPOV, F.F., inzh. (Moskva)

Quantitative evaluation of the quality of the voltage in a  
distribution network. Elektrichestvo no.1:16-21 Ja '62.

(MIRA 14:12)

(Electric power distribution)

BYSTROV, L.N. (Moskva); IVANOV, L.I. (Moskova); PROKOSHIN, D.A. (Moskva);  
Prinimal uchastiye KARPOV, F.F., student

Creep of copper and copper-nickel alloys under torsion. Izv. AN SSSR.  
Otd. tekhn. nauk. Met. i topl no. 5: 197-209 S-O '62. (MIRA 15:10)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut imeni Lenina  
(for Karpov).  
(Creep of copper) (Torsion)

KARFOV, Fedor Fedorovich; KAMINSKIY, Ye.A., red.

[How to verify the proper connection of motors with short-circuited rotors to a power supply network] Kak proverit' vozmozhnost' podkliucheniia k elektricheskoi seti dvigatelei s korotkozamknutym rotorom. Izd.2., perer. i dop. Moskva, Izd-vo "Energia," 1964. 93 p. (Biblioteka elektromontera, no.123) (MIRA 17:8)

RAMON, Fedor Fedorovich; KOTLOV, Valer'yan Nikolayevich [deceased];  
SAMINSKIY, Ye.A., red.

[Handbook on wire and cable calculations] Spravochnik po  
raschetu provodov i kabelei. Izd.2. Moskva, Izd-vo  
"Energia," 1964. 222 p. (MIRA 17:7)

FEDIN, V.T., inzh.; GLAZUNOV, A.A., kand.tekhn.nauk; MEL'NIKOV, N.A.,  
doktor tekhn.nauk; SOLDATKINA, L.A., kand.tekhn.nauk; KARPOV,  
F.F., kand.tekhn.nauk; ARKH'POV, N.K., inzh. [deceased]

Efficiency of load controlling device of 35 and 110 kv. transformers.  
Elek. sta, 36 no.2:85-88 F '65. (MIRA 18:4)



SERTSOVA, A., kand.filosofskikh nauk; KARPOV, G., kand.filosofskikh nauk

Education of new men is the practical objective of the building  
of communism. Komm.Vooruzh.Sil 2 no.5:49-54, Mr '62. (MIRA 15:2)

(Communist education)  
(Russia—Armed forces—Political activity)

KARPOV, G. A.

"Investigation of the Parameters of the Hydraulic Transport of Coal in the Complex Solution of Problems of Underground Transport in Hydraulic Mines."  
Cand Tech Sci, Leningrad Order of Lenin and Labor Red Banner Mining Inst, Min  
Higher Education USSR, Leningrad, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

FAVOR, G. A.

1172 Issledovaniye parametrov gidravlicheskogo transportirovaniya urlya pri Ko-  
mpleksnom reshenii voprosov podzemnogo transporta na gidroshakh-takh. L., 1954  
11 s. 21 sm. (M-vo vyssh. obrazovaniya SSSR. Leningr. ordena Lenina i ordena Trud  
Krasnogo Znameni gornyy int) 115 ekz. P. ts. - (54-54208)

SO: Knizhaya letopis', Vol. 1, 1955

KARPOV, G.A.

Hydraulic coal mining in the Chinese People's Republic.  
Trudy VNIIGidrouglia no.2:120-122 '65. (MIRA 17:6)

1. Sitirskiy metallurgicheskiy institut.

KARPOV, G.A.; KUPRIN, A.I.; PIGOROV, G.B.

Investigating local resistances in pressureless hydraulic  
conveying of run-of-the-mine materials. Trudy VNIIGidrauglia  
no. 32119-124 '63 (MIRA 18:3)

1. Sibirskiy metallurgicheskiy institut.

ACC NR: AP6030749

(A, N)

SOURCE CODE: UR/0394/66/004/007/0019/0021

AUTHOR: Kamorzina, I. G.; Karpov, G. A.; Knyazeva, K. S.

ORG: Scientific Research and Technological Design Institute of Chemical Goods for Cultural and Domestic Purposes (Nauchno-issledovatel'skiy i proyektno-tokhnologicheskiiy institut khimicheskikh tovarov kul'turno-bytovogo naznacheniya)

TITLE: Results of tests of fragrant substances as deodorants for insecticides and repellents

SOURCE: Khimiya v sel'skom khozyaystvo, v. 4, no. 7, 1966, 19-21

TOPIC TAGS: insecticide, deodorant, organic chemistry

ABSTRACT: The object of the experiments was to study the reactions of fleas and mosquitoes (Aedes) to fragrant substances and essential oils which can be used (separately or in combination) as deodorants in insecticide preparations. Fifty-three compounds (essential oils, alcohols, aldehydes, acids, esters, essences and soap deodorants) were tested under laboratory conditions at 23°C, and found to be divided into attractants, repellents, and indifferent substances. It is shown that the deodorant substances should be tested only in concentrations up to 1%. Different species of insects may react in different ways to the same fragrant substances. For example, a 1% solution of jasmine aldehyde is a repellent to fleas but an attractant to mosquitoes. A 1% solution of citral is indifferent to fleas, but a repellent to mosquitoes. For this rea-

Card 1/2

UDC: 623.951:668.529

ACC NR: AP6030749

son, the effect of a series of fragrant substances was tested by the TsNIDI method on cockroaches (*Blattella germanica*). The data indicate that the substances should also be tested (separately and in mixtures with insecticide chemicals) on other species of insects. In selecting the deodorants, it is necessary to consider their compatibility with repellents or insecticides, so that the deodorants will not weaken the action of the compound but will enhance it. Orig. art. has: 3 tables.

SUB CODE: 0607/SUBM DATE: 30Oct65/ ORIG REF: 001/ OTH REF: 005

Card 2/2

KARPOV, G. D., et al.

Technology

Practices in smelting steel by the high-speed methods of steelworkers N.E. TSyshnatyi, I. K. Shevchenko, and N.S. Todorov of the open-hearth division of the "Azovstal'" mill, Moskva, Metallurgizdat, 1951

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.



K.D. B. G.D.  
SIDEL'KOVSKIY, M.P.; SHUM, B.M.; FRADIN, M.D.; TSILEVICH, I.Z.;  
BUL'SKIY, M.T.; YASHCHENKO, V.A.; KARPOV, G.D.

[Improvement of rolling-mill technology on the basis of  
advanced experience] Usovershenstvovanie tekhnologii v  
prokatnykh tsekhakh na baze peredovogo opyta. Moskva, Gos.  
nauchno-tekhn. izd-vo lit-ry po chernoi i tavetnoi metallur-  
gii, 1953. 306 p. (MLRA 7:3)  
(Rolling mills)

SOV/137-58-7-14385

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 63 (USSR)

AUTHORS: Kapustin, Ye.A., Karpov, G.D., Khiish, L.I.

TITLE: Output Rate and Thermal Regime of a Tilting Open Hearth in the Course of a Campaign (Proizvoditel'nost i teplovaya rabota kachayushcheysya martenovskoy pechi na protyazhenii yeye kampanii)

PERIODICAL: Tr. Donetsk. otd. Nauchno-tekhn. o-va chernoy metallurgii, 1957, Nr 5, pp 23-38

ABSTRACT: The results of a statistical analysis of the results of operation of tilting open hearths with conventional silica-brick and magnesite-chromite roofs in the course of full campaigns are adduced. It is established that all indices of operation change in the course of a campaign: Length of heat (LH), thermal load (TL), unit fuel consumption, and temperature of air and gas checkers. The curve of variation in the LH during the course of a campaign has 3 characteristic regions; a well-defined minimum in the vicinity of heats 40 to 50 (the LH being 93-96% of the average for the campaign), a virtually flat region from the 80th to the 140th heat (LH being equal to the average for the

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SOV/137-58-7-14385

Output Rate and Thermal Regime of a Tilting Open Hearth (cont.)

campaign), and a sharp rise at the end of the campaign, exceeding the average LH by 10-15%. The working period shows little change in the course of the campaign, if we disregard the first 10 heats and the last at the end of the campaign. The length of the melting period changes sharply in accordance with the change in the LH during the campaign. In the course of a campaign the TL rises during all the periods of the heat, except for that prior to the 30th to 50th, during which time a steady reduction to a minimum of 19.5-20 million kcal/hr occurs. The TL rises by 6-7 million kcal/hr in the course of the campaign. The difference between the TL during the charging and heating period and the TL during the period of pure boil representing (approximately) the useful portion of the load undergoes a systematic decline during the campaign (from ~ the 40th to the 80th heats), and this testifies to the fact that the bath fails to receive a significant amount of heat, leading to an increase in the melting period and the LH. The nature of the change in the unit fuel consumption in the course of a campaign follows the trend of the changes in the LH, i.e., it is characterized by a minimum in the vicinity of the 40th heat, with a systematic increase toward the end of the campaign (with a minimum value of 130 kg/t to 180-200 kg/t). The highest gas-checker temperatures in the course of the campaign are those recorded approximately up to the 80th heat, followed by a continued drop from 1250 to 1000°C at the Card 2/3

SOV/137-58-7-14385

Output Rate and Thermal Regime of a Tilting Open Hearth (cont.)

end of the campaign. The temperature of the air checkers at about the 120th-140th heats shows a maximum of 1125-1225°, dropping later to 1000°. Reduction of the difference between furnace-operation indices during the initial and terminal periods of a campaign requires careful maintenance of the furnace, primarily of the checker chambers, the slag pockets, and the gas ports, and adjustment of the TL during the campaign so that the useful TL remain at a constant and high level.

N.I.

1. Open hearth furnaces--Statistical analysis    2. Open hearth furnaces  
--Operation

Card 3/3

SOV/133-58-10-29/31

AUTHORS: Kapustin, Ye.A., Candidate of Technical Sciences,  
Makovskiy, V.A. and Karpov, G.D., Engineers

TITLE: Ageing and Thermal Load of an Open-hearth Furnace  
(Stareniye i teplovaya nagruzka martenovskoy pechi)

PERIODICAL: Stal', 1958, Nr 10, pp 952 - 956 (USSR)

ABSTRACT: Changes in the thermal operating conditions of an open-hearth furnace in the course of its campaign are discussed on the basis of data on the operation of 350-ton tilting furnaces in the "Azovstal'" Works. In view of difficulties of the evaluation of slow changes in the operation of an open-hearth furnace in the course of a campaign (on "ageing") two indices are proposed - "thermal load of idle running" and "active thermal load". From the value of heat consumption during idle running during the individual periods of a campaign, the economy of the furnace operation and the value of the active thermal load (the difference between the absolute thermal load during a given melting period and the load of idle running) can be evaluated. Changes in the thermal load of idle running can be determined from changes in the thermal load during bottom repairs and during the periods of pure

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Ageing and Thermal Load of an Open-hearth Furnace SOV/133-58-10-29/31

boiling and deoxidation. As the thermal work of an open-hearth furnace in the course of a campaign is continuously changing when establishing thermal operating conditions, it is necessary to take into consideration thermal load during idle running. There are 8 figures

ASSOCIATIONS: (Zhdanov Metallurgical Institute)  
Zhdanovskiy metallurgicheskiy institut  
and Zavod "Azovstal'" ("Azovstal'" Works)

Card 2/2

GLINKOV, G.M.; KALOSHIN, N.A.; KAPUSTIN, Ye.A.; KARPOV, G.D.; RUDMAN, V.D.;  
KHIISH, L.I.

Results of modeling open-hearth furnaces fired by cold high-calorie  
gas and hot mixed gas. Izv. vys. ucheb. zav.; chern. met. no.2:  
138-147 '61. (MIRA 14:11)

1. Zhdanovskiy metallurgicheskiy institut.  
(Open-hearth furnaces--Models)  
(Gas flow--Models)

S/130/61/000/012/005/006  
A005/A101

AUTHORS: Podol'skaya, G. A., Karpov, G. D., Shklyar, V. S.

TITLE: Section furnaces for high-speed metal heating

PERIODICAL: Metallurg, no. 12, 1961, 36-38

TEXT: Section furnaces were mounted in 1959 at the ball rolling shop of the "Azovstal'" Plant. The furnaces have different features according to the capacity of the rolling mills. Furnace no. 1 has 5 zones with 4 sections each, and supplies heated metal to mill 620 for the rolling of balls of 40, 50, 60 and 80 mm in diameter. Furnace no. 2 consists of 6 zones, 5 of which have 4, and the sixth 5 sections; this furnace supplies mill 1040 for rolling balls of 60, 80, 100 and 115 mm in diameter. The furnaces are fuelled with a mixture of coke and blast furnace gas from a common collector. The blanks are moved by water-cooled rolls mounted at an angle of  $8^\circ$  in respect to the axis, which is perpendicular to the motion of the blanks. This arrangement assures uniform heating of the blanks. Satisfactory circulation of the furnace gases is assured by the tangential arrangement of torches (Fig. 2). The specific duration of heating the blanks is 1.5 - 2 min/cm thickness. The air is heated in recuperator-

Card 1/2

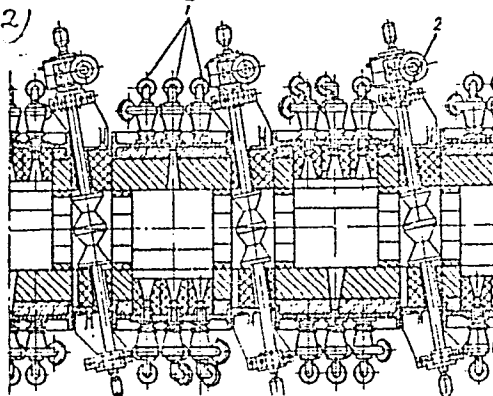


Section furnaces for high-speed metal heating

S/130/61/000/012/005/006  
A006/A101

thermoblocks. The heat load is automatically regulated; however, this method shows some deficiencies, such as inertia of devices, lack of a device to determine the temperature of metal heating; and unsatisfactory arrangement of the devices in the shop. Requirements to refractory material are very high because of considerable changes in temperature. It was found that chrome-magnesite bricks showed satisfactory results when used as a lining for the furnace walls and the bottom. According to the heat conditions developed, the furnaces are intended to operate at  $1,150 - 1,300^{\circ}\text{C}$ , i.e. relatively low temperature range which facilitates the service conditions of the refractory masonry. Presently the rated efficiency of the mills has been reached for the rolling of 40, 60 and 80 mm diameter balls. There are 2 figures.

Fig. 2: Arrangement of torches 1 and rolls 2 in the furnace



Card 2/2

BUTURLINOV, N.V.; PANGOV, B.S.; KOBELIEV, M.V.; LARGOV, G.F.

New data on Devonian igneous activity in the southwestern  
margin of the Donets Basin. Dokl. AN SSSR 156 no. 4:817-  
820 Je '64. (MIRA 17:6)

1. Donetskiy politekhnicheskii institut. Predstavleno akademikom  
D.S.Korzhinskim.

KUZNETSOV, V.D. Primali uchastiye: KOSTYLEVA, A.I., dotsent, kand. fiz.-mat.nauk; KARPOV, G.I., starshiy nauchnyy sotrudnik, kand. fiz.-mat.nauk; DOBROVIDOV, A.N., prof., doktor tekhn.nauk; DEGTYAREV, V.P., dotsent; BOL'SHANINA, Mariya Aleksandrovna, prof., doktor fiz.-mat.nauk, laureat Stalinskoy premii, otv.red.

[Solid state physics] Fizika tverdogo tela. Tomsk, Izd-vo Poligrafizdat. Vol.4. [Materials on the physics of external friction, wear, and internal friction in solids] Materialy po fizike vneshnego trenia, iznosa i vnutrennego trenia tverdykh tel. 1947. 542 p. Vol.5. [Materials on the physics of the plasticity and brittleness of metals] Materialy po fizike plastichnosti i khrupkosti metallov. 1949. 699 p.

(MIRA 14:4)

1. Tomskiy gosudarstvennyy universitet (for Kostyleva, Bol'shanina).
2. Sibirskiy fiziko-tekhnicheskii institut (for Karpov). 3. Tomskiy politekhnicheskii institut (for Dobrovidov). 4. Sibirskiy metal-lurgicheskii institut, g. Stalinsk (for Degtyarev).

(Solids)



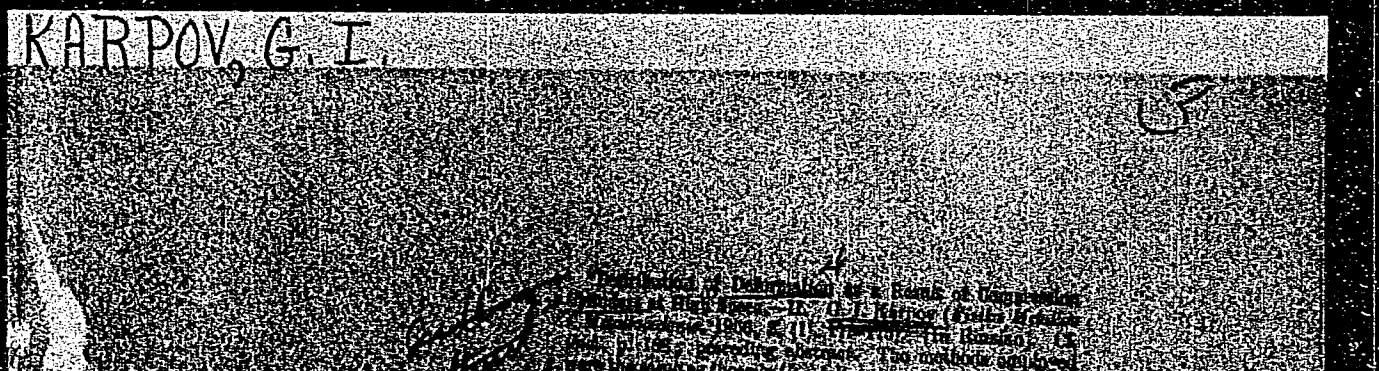
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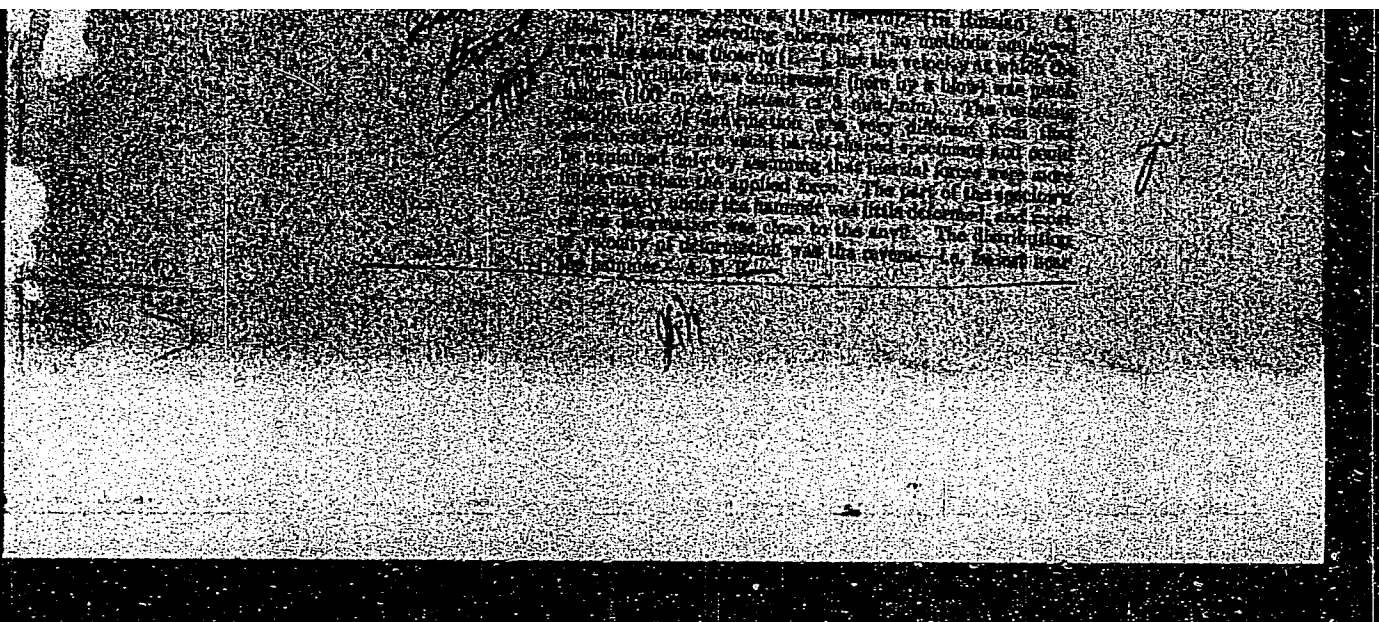
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*Richard P. [illegible]*

APPROVED FOR RELEASE: 06/13/2000

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Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 11, p 224 (USSR) SOV/137-58-11-23411

AUTHORS: Popov, L. Ye., Karpov, G. I.

TITLE: On the Mechanism of Plastic Deformation of Ni-Cr Alloys in the  $\text{Ni}_3\text{Cr}$  Region (K voprosu o mekhanizme plasticheskoy deformatsii nikel' - khromistyykh splavov v oblasti sushchestvovaniya soyedineniya  $\text{Ni}_3\text{Cr}$ )

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Fizika, 1958, Nr 1, pp 163-167

ABSTRACT: Changes in the electrical resistivity (ER) of alloys of Ni with 11.2 at. per cent (I) and 22 at. % Cr (II) were investigated after the alloys were subjected to plastic deformation (D) at different temperatures. After drawing, specimens of II which were given the form of a wire 1.1 m (sic!) in diameter, were rapidly heated to  $950^\circ\text{C}$ ; after soaking at this temperature for a period of two hours they were quenched in water. The heating was carried out in vacuum. After analogous heat-treatment procedures, specimens of I were allowed to cool to room temperature together with the quartz tubes in which they had been contained while in the oven; thus the rate of cooling amounted to several tens of degrees [Centigrade] per minute. Specimens of I were elongated by 3, 5, 15, and 30% at room temperature and at temperatures of 100

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*Siberian Phys-Tech Inst - Toront. Inst. U. in V.V. Kuznetsov*



SOV/137-58-11-23411

On the Mechanism of Plastic Deformation of Ni-Cr Alloys in the  $\text{Ni}_3\text{Cr}$  Region

and  $380^\circ$ . Specimens of II were subjected to the same degree of deformation but at temperatures of 100, 200, and  $380^\circ$ . After the deformation, the ER of the alloys at room temperature was measured with the aid of a Kelvin double bridge. The ER value was obtained by averaging the ER values for five specimens. It is established when the D proceeds stepwise that the rate of increase of the ER in the case of both alloys is at a maximum when the degree of D is small and that it decreases sharply thereafter. At higher temperatures the decrease in rate occurs at smaller deformations, the magnitude of the ER, however, becoming greater at that point. As shown by curves representing the ER under gradual D ( $200^\circ$  and room temperature in the case of I and  $100^\circ$  in the case of II), the ER diminishes as the degree of the D is increased. It is concluded that the stepwise character of the D in alloys investigated is connected with the hardening effect of a  $\text{Ni}_3\text{Cr}$  compound which is formed during the D. It is demonstrated that, as the cooling rate of II to  $950^\circ$  [sic! Probably intended to read "down from"; Transl. Ed. Note] is reduced, the flow stresses encountered at a temperature of  $400^\circ$  increase by 17-20%. This phenomenon is also linked with the hardening influence of the  $\text{Ni}_3\text{Cr}$  compound. The fact that similar phenomena were observed in both I and II indicates that a  $\text{Ni}_3\text{Cr}$  compound may exist beyond the boundaries of stoichiometric relationships.

L. G.

Card 2/2

56511

SOV/137-59-7-15601

18.7100

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 7, pp 231 - 232 (USSR)

AUTHOR: Tarpov, G.I.

TITLE: ~~Changes in the Properties of Dynamically and Statically Cold Hardened~~  
Metal in Annealing

PERIODICAL: Tr. Sibirsk. fiz.-tekhn. in-ta, 1958, Nr 35, pp 21 - 25

ABSTRACT: Inversion of annealing curves for Sn, Cu and Al was investigated. Cylindrical Sn specimens of 8 x 12 mm were subjected to compression by 28% of the initial height at three different rates:  $V_1 = 0.017$  mm/sec;  $V_2 = 0.4$  mm/sec; and  $V_3 = 5,000$  mm/sec. Then, immediately, some specimens were subjected to further compression at a  $V_1$  rate; other specimens were subjected to soaking at room temperature for 48 hours and then to compression at  $V_1$  rate. Cu specimens were subjected to compression by 38% at  $V_1$  and  $V_3$  rates. Then some specimens were annealed at 100°, 150°, 200° and 250°C for two hours. Subsequently, all specimens were subjected to secondary compression at  $V_1$  rate. Al specimens were annealed at 500°C for two hours and then subjected to the same treatment as Cu-specimens; annealing in this case was carried out

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NOV/13/59-7-15601

Changes in the Properties of Dynamically and Statically Cold Hardened Metal in Annealing;

$-10^{\circ}$ ,  $0^{\circ}$ ,  $75^{\circ}$  and  $400^{\circ}$ C. It was stated that distortions of the lattice in dynamic deformation were less temperature resistant than in static deformation. Recovery of properties began at lower temperature and could entail inversion of annealing curves, e.g. for Cu and Sn. Al was substantially different in this respect: although dynamic deformation caused increased hardening, the temperature stability after dynamical deformation was not much different from this stability in static deformation. Al did not possess a clear-cut temperature of recovery. Distortions of the third kind in Al were reduced not at recrystallization temperatures but within wide temperature range.

V.S.

4

Cont.

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67912

SOV/20-129-5-18/64

~~1-(6)~~

AUTHORS:

Popov, L. Ye., Karpov, G. I.

TITLE:

The Influence of the Temperature of Hardening on the Process of the Formation of the Short-range Order in a Ni-Cr Alloy

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 5, pp 1028-1030 (USSR)

ABSTRACT:

The authors investigated the influence of hardening temperature on the kinetics of the formation of the short-range order (K-state) in an Ni alloy with 16.6 percents Cr by weight at low-temperature precipitations. The samples, produced in form of wires of 1 mm diameter, were subdivided into several portions, each of which was annealed in vacuum for 4 hours at 950°. The samples were then cooled and heated respectively in a furnace to hardening temperature (650; 750; 950; 1000; 1100°), left at these temperatures for from 5 to 60 minutes, after which they were quenched in water. Finally, the samples were tempered at 300°. After 5; 15; 30 minutes, 1 and 2 hours they were taken out of the furnace and their electric resistivity was measured at room temperature by means of a double Thomson bridge. At the beginning of annealing (during about half an hour) electric

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67912

SOV/20-129-5-18/64

The Influence of the Temperature of Hardening on the Process of the Formation of the Short-range Order in a Ni-Cr Alloy

resistivity increases rapidly, but later more slowly. The resistivity of the hardened alloy immediately after hardening, if this takes place at  $850^{\circ}$ , is the lowest. The decrease of electric resistivity during the rise in hardening temperature from  $650^{\circ}$  to  $850^{\circ}$  is apparently interrelated with the decrease in the degree of the short-range order. At higher temperatures this decrease in electric resistivity is equalized by the increase of electric resistivity due to the increase in the concentration of tempering vacancies. The increase  $\Delta\varrho$  of electric resistivity increases monotonously at low-temperature hardening with increasing hardening temperature. At high hardening temperatures this increase, however, becomes slower. By comparing the isothermal lines of electric resistivity determined at various temperatures, also the activation energy of the migration of tempering vacancies was determined. The higher the hardening temperature, the more rapidly will one and the same degree of the short-range order be attained. In the case of isothermal tempering at  $200^{\circ}$  and  $250^{\circ}$  after quenching from  $1000^{\circ}$ , the activation energy is 37 kcal/mole. Similar activation energy values were determined at 200; 250; 280;  $300^{\circ}$  after hardening.

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67912

SOV/20-129-5-18/64

The Influence of the Temperature of Hardening on the Process of the Formation of the Short-range Order in a Ni-Cr Alloy

from various temperatures. The average activation energy was  $38.7 \pm 2$  kcal/mole. There are 4 figures and 9 references, 3 of which are Soviet.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskoy nauchno-issledovatel'skiy institut pri Tomskom gosudarstvennom universitete im. V. V. Kuybysheva (Siberian Scientific Research Institute of Physics and Technology of Tomsk State University imeni V. V. Kuybyshev)

PRESENTED: August 6, 1959, by G. V. Kurdyumov, Academician

SUBMITTED: July 29, 1959

Card 3/3

PRANK 1 BOOK REFLECTION DEC/4/2022

Abstracts sent 1982. Machinery now to produce thermoplastic spacers  
Isodermalny po shirokoty splyava, tom 6 ( Investigations of Heat-  
Resistant Alloys, Vol. 6) Moscow, 1980. 312 p. First ed. inserted.  
5,000 copies printed.

Спонсоринг Агентств Абхазиян дунд ЭСЭН. Төлөөгүй ноогдсон төмөр х. а. а. дүнхн. Төмөрнөөр гэрчлэлтэй гэрчлэлтэй.

Editorial Board: L. P. Bartlett (Dorchester, U. K.), V. E. Cossentino, N. V. Agmon, Corresponding Member, Academy of Sciences USSR (Moscow, U. S. S. R.), L. K. Pavlov, and L. P. Solov'ev, Collection of Scientific Articles  
Ed. of Publishing House: V. A. Eliseyev, Math. Sci. B. G. Tikhonov.

**PURPOSE:** This book is intended for research workers in the field of physics of metals and for metallurgists, particularly in non-ferrous alloys.

**CONCLUSIONS:** Solubilization of 15 aromatic dyes with various problems in the production of heat-resistant materials. Special attention is paid to the solubilization of disperse dyes with a sulfonic group. The solubilization of disperse dyes with a sulfonic group is carried out by the method of chemical modification of such groups as acetamido, carboxyl, amino and aldehyde. Various effects and features of such modifications are described, and means for increasing the heat resistance and plasticity are described. Among the special products obtained are disperse dyes with a sulfonic group, which are soluble in water. The heat resistance and plasticity of films of such dyes is described. The solubilization of disperse dyes with a sulfonic group is carried out by the method of chemical modification of such groups as acetamido, carboxyl, amino and aldehyde. Various effects and features of such modifications are described, and means for increasing the heat resistance and plasticity are described. Among the special products obtained are disperse dyes with a sulfonic group, which are soluble in water. The heat resistance and plasticity of films of such dyes is described. The solubilization of disperse dyes with a sulfonic group is carried out by the method of chemical modification of such groups as acetamido, carboxyl, amino and aldehyde. Various effects and features of such modifications are described, and means for increasing the heat resistance and plasticity are described. Among the special products obtained are disperse dyes with a sulfonic group, which are soluble in water. The heat resistance and plasticity of films of such dyes is described.

# Dehghani, L. M. Influence of the Defects of Crystalline Structure on the Kinetics of Creep Activation

Demetrius, V.D., and A.I. Lokhtov. Influence of Temperature and Degree of Prior Deformation on the Plasticity of Aluminum and Copper

POPEY, L. H., G. A. Dwyer, and R. A. ALLENBERRY. The Mechanism of the  
Initiation of Polymerization in Alkyls

Baron, V. D., K. S. Shvachko, and M. S. Gubinskaya. Effect of the Reproducibility of Gating Processes on the Temperature-Velocity Dependence of the Mechanical Properties of Densified Polymer Composites

RESEARCH, INC., E. F. SNYDER, R. H. SHULTZ, and N. C. DUNN, C. F. ROYCE, and A. P. MULLISY - Effects of Temperature Variation and Sulfur Gas on the Properties of Steels With Different Dispersibility of Oxide Inclusions

Effect of Temperature on the Concentration of Solid Solution and Deformation Conditions

72

Continued on V-10, ATTACHED.  
on the Indication of Blood      LIST OF VARIABLE BLOOD CONDITIONS

77

89

95

~~Investigation of Electrolytic Conductivity of Lithium-Aluminum Alloys in Molten Salts~~

10 RELATIONSHIP BETWEEN DISLOCATION  
DEFLECTION, B.L. AND S.N. BOYDLOV.  
BRITISH, THEORETICAL S.M.P., AND BULLING

13 the Changes of Components in Scale-Invariant Alloys of Fe-Al System

effect of nonequilibrium defects of crystalline structure on the mobility of atoms in nickel-iron alloys

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Sedgwick, A.A., and T.O.A. FIDOROVA. Investigation of Decomposition of the Crystalline Lattice of an Alloy According to the

POPOV, L.Ye.; KARPOV, G.I.

Effect of tension and plastic deformation on the formation of the  
K-state in Ni-Cr alloy. Izv.vys.ucheb.zav.;fiz. no.2:111-113 '60.  
(MIRA 13:8)

1. Sibirskiy fiziko-tekhnicheskoy institut pri Tomskom gosuniversitete  
im. V.V. Kuybysheva.

(Nickel-chromium alloys)  
(Phase rule and equilibrium)



S/659/62/008/000/019/028  
I048/I248

AUTHORS: Popov, L.Ye, and Karpov, G.I.

TITLE: Kinetics of formation of the K-state in tempered and cold-worked nickel-chromium alloys

SOURCE: Akademiya nauk SSSR. Institut metallurgii, Issledovaniya po zharoprochnym splavam. v.8. 1962. 131-137

TEXT: The kinetics of formation of the K-state in a Ni-based alloy containing 16.6% Cr, 0.34% Si, 0.4% Fe, 0.03% S, and 0.014% C were studied in an attempt to determine the structural defects taking part in the process. The alloy specimens were tempered for 2 hrs. at 950°C (in vacuo), then heated and held for 30 min. at 1000°C, quenched in water, and annealed at 200-300°C. Another series of specimens were subjected to a similar heat treatment but the tempering temperature was 700°C and the annealing temperature was 400-500°C. Specimens from the first series showed a sharp increase in electrical resistivity at temperatures exceeding 300°C. Specimens

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S/659/62/008/000/019/028  
I048/I248

Kinetics of formation of the K-state...

of the second series were also characterized by an increase in electrical resistivity with temperature, but equilibrium resistivity was reached after a prolonged time only and the electrical resistivity isotherm was used to calculate the energy of activation ( $U$ ) for the formation of the K-state; the average value of  $U$  was  $30 \pm 2$  kcal./mole, and its independence of variations in the temperature (within the range of 200-500°C) indicated that the formation of the K-state is governed by a single mechanism, probably the motion of vacancies. Part of the tempered specimens were cold-drawn and then either held at room temperature or at 100°C, or annealed at temperatures up to 600°C. The electrical resistivity of these specimens increased with time, from about 95.3 microhm.cm. immediately after the drawing to 96.1 microhm.cm. after 10<sup>5</sup> min. at 20°C, or to 96.2 microhm.cm. after 80 min. at 75°C, or to 96.6 microhm.cm. after 10 min. at 100°C. The average value of  $U$  at temperatures above 100°C was  $36 \pm 3$  kcal./mole, and it was assumed

Card 2/3

S/659/62/008/000/019/028  
I048/I248

Kinotics of formation of the K-state...

that the increase in electrical resistivity was associated with the movement of vacancies caused by plastic deformation. There are 5 figures and 1 table.

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S/020/62/142/001/013/021  
B104/B102

AUTHORS: Popov, L. Ye., Karpov, G. I., Panova, L. M., and Pleshkov, A. V.

TITLE: Formation of the K-state in cold-worked chrome-nickel alloys

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 1, 1962, 72-74

TEXT: The variations in electrical resistance and volume of cold-worked wire (2.2 mm in diameter) of a nickel alloy (16.6% Cr; 0.34% Si; 0.014% C; 0.03% S; 0.4% Fe) were investigated at different annealing temperatures. The samples were heated to 1000°C and quenched in water, and their diameters were then reduced to 1 mm. The electrical resistance dropped by 10% owing to destruction of the K-state. Subsequently, the samples were annealed for 10, 21, and 90 min at 20-600°C, intervals of 25°C. The variations in electrical resistance and length (Fig. 1) are divided into three temperature ranges: I: 20-120°C; II: 120-420°C; III:  $t > 420^\circ\text{C}$ . In range I, the changes in lattice parameters, leading to the formation of the K-state, are small. The volume is changed by the elimination of lattice defects. In range II, the activation energy U required for the motion of defects

Card 1/3

Formation of the K-state in ...

S/020/62/142/001/013/021  
B104/B102

leading to the formation of the K-state almost equals that of the hardened alloy. This stage is associated with the motion of vacancies. For the range II  $U = 1.56 \pm 0.13$  ev. In range III, the sharp increase in activation energy with rising temperature is due to the increasing influence of thermal vacancies. The activation energy in range I is about half as high as in range II (0.77-0.85 ev) and is close to the migration energy of dislocated atoms in nickel. There are 3 figures and 20 references: 6 Soviet and 14 non-Soviet. The four most recent references to English-language publications read as follows: I. A. Brinkman, C. E. Dixon, C. I. Meechan, Acta Met., 2, 38 (1954); R. A. Dugdale, Phil. Mag., 1, 597 (1956); G. R. Piercy, Phil. Mag., 5, no. 51, 201 (1960); L. M. Clarebrough, M. G. Hargreaves, M. H. Loretto, G. W. West, Acta Metallurgica, 8, no. 11, 797 (1960).

ASSOCIATION: Sibirskiy fiziko-tekhnicheskii institut pri Tomskom gosudarstvennom universitete im. V. V. Kuybysheva (Siberian Physicotechnical Institute at the Tomsk State University imeni V. V. Kuybyshev)

PRESENTED: July 20, 1961, by G. V. Kurdyumov, Academician

Card 2/3

POPOV, L.Ye.; KARPOV, G.I.; PANOVA, L.M.

Spectrum of atomic defects participating in the formation of short-range  
order in nickel-chromium alloys, Ukr. fiz. zhur. 8 no.2:226-232 F '63.  
(MIRA 16:2)

1. Sibirskiy fiziko-tekhnicheskii institut AN SSSR, Tomsk,  
(Nickel-chromium alloys) (Crystals—Defects)

S/185/63/008/002/008/012  
D234/D308

AUTHORS: Popov, L. Ye., Karpov, G. I. and Panova, L. M.

TITLE: Spectrum of atomic effects participating in the process of the formation of short-range order in nickel-chromium alloys

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 8, no. 2, 1963, 226-232

TEXT: The authors investigated an alloy of 16.6% Cr, 0.34% Si, 0.014% C, 0.03% S, 0.4% Fe, the rest Ni, annealed at 1000°C in vacuum and hardened in water, then subjected to cold plastic deformation. Some specimens were annealed again for 2 hours, and all were subjected to tempering. Procedures for measuring the electrical resistance and length are described. Cold deformed specimens have three stages: I) near 80 - 100°C, where  $\rho$  increases and length varies considerably, II) at 200 - 450°C, III) near 500°C, where  $\rho$  decreases. In the hardened alloy there is only one stage corresponding to the interval as in II above. Activation energies are

Card 1/2

Spectrum of atomic ...

S/185/63/008/002/008/012  
D234/D308

0.97 + 0.15 eV for the stage I; 1.66 + 0.13 for the stage II and for the hardened alloy. It is most probable that the formation of K state at stage I is due to migration of dislocated atoms. Stage II is connected with migration of unbalance vacations and stage III with that of thermal vacancies. There are 2 figures.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskii institut (Siberian Physicotechnical Institute), Tomsk

Card 2/2



COUNTRY : USSR

CATEGORY : Cultivated Plants. Fruits. Berries. Nuts. Tea.

ABS. JOUR.: RZhBiol, No. 4, 1959, No. 15787

AUTHOR : Karpov, G. K.

INST. :

TITLE : Problem of Quality Variation of Buds in Apple Trees.

ORIG PUB. : Agrobiologiya, 1958, No. 3, 135-136

ABSTRACT : Since 1954 the Central Genetics Laboratory (Michurinsk) has been studying the quality variation of buds in apple trees, cherry trees, black currant and strawberry. In the apple trees Pepin shafranny, Oranzhevoye, Zolotaya osen' and Rozovoye prevoskhodnoye with budding to kitayka the height of the one-year tree was increased in the direction from the bud taken from the bottom part of shoots to buds taken from the top part. Compared with plants from bottom formation buds, the

Card: 1/2 CENT. GENETICS LAB IM I. V. MICHURIN

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 4 1959, No. 15787

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : two-year-olds from top formation buds finished the  
phase of shoot growth more rapidly.

Card: 2/2

140

KARPOV, G. K., prof., doktor sel'skokhoz.nauk, red.; SUVALOV, I. S.  
red.; ANTONOVA, N.M., khud.-tekhn.red.

[Breeding fruits and berries for winter hardiness and constant yields] Seleksiia plodovykh i iagodnykh kul'tur na ezhegodnuiu urozhainost' i zimostoikost'. Pod obshchei red. G.K.Karpova. Moskva, Izd-vo M-va sel'.khoz.SSSR, 1961. 339 p.

(MIRA 14:4)

1. Michurinsk, Russia. TSentral'naya geneticheskaya laboratoriya imeni I.V.Michurina. 2. TSentral'naya geneticheskaya laboratoriya imeni I.V.Michurina (for Karpov).  
(Fruit culture)

KARPOV, G. K.

The agricultural technique of raising fruits and berries. Moskva, Sel'khozgiz, 1946.  
302 p.

KARPOV, G. K.

35362. Michurinskie sorta v orlovsky oblasti. Orlov. Al'manakh, kn. 2, 1949  
s. 214-18

SO: Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

Name: KARPON, Grigoriy Karpovich

Dissertation: Biol foundation of pruning of apple  
trees

Degree: Doc Agr Sci

Affiliation: Central Genetic Laboratory imeni  
Michurin - *Leningrad Agr Inst*

Defense Date, Place: 29 Jan 57, Council of Leningrad Agr  
Inst

Certification Date: 8 Jun 57

Source: BMVO 16/57

KARPOV, G.K., doktor sel'skokhoz. nauk

Effect of temperature on development stages and formation  
of flower buds in the apple tree. Trudy TSGL 6:501-524 '57.  
(MIRA 12:10)  
(Apple) (Plants, Effect of temperature on)

L 10271-63

RWT(1)/BDS/ES(w)-2--AFFTC/ASD/SSD--Pab-l--IJP(C)

ACCESSION NR: AP3002734

8/0120/63/000/003/0118/0121

AUTHOR: Tantsy\*rev, G. D.; Karpov, G. V.; Tal'roze, V. L.

TITLE: Analytical mass spectrometer with modulated molecular beam

SOURCE: Pribery i tekhnika eksperimenta, no. 3, 1963, 118-121

TOPIC TAGS: mass spectrometer, trace detectability, molecular beam modulation

ABSTRACT: Modifications of existing mass spectrometer design are described, consisting of modulating the injected gas molecule beam prior to its ionization and replacing the usual collector head with a multiplier tube, electrometer amplifier, a-c amplifier, and phase detector. This method increases the detectability of small traces which tend to be obscured by noise effects in the apparatus, such as residual gas in the vacuum chamber, gas evolution from chamber elements, and adsorption. Beam modulation (see Fig. 1 of Enclosure) is obtained by the action of shutter 7, which is energized by solenoid 8 to interrupt the beam between diaphragms 2 and 6 at periodic rates up to 100 cps. In this way, only the desired gas in modulated form is detected for analysis. Electrometer amplifier input impedance is approximately 100 megohms, and a-c amplifier gain is about 300. Sample data are given showing the comparative interference effects with and without

Card 1/82



KARPOV, G. V.

KARPOV, G. V. --"Investigation of the Operation of Spherical Disk Valves of Piston Compressors." \*(Dissertations for Degrees in Science and Engineering submitted at USSR Higher Educational Institutions) Min of Higher Education USSR, Leningrad Polytechnic Institute N. I. Kalinin, Leningrad, 1955

SC: Nauchnye Izvestia, No. 25, 12 Jun 55

\* For Degree of Candidate in Technical Sciences

DMITREVSKIY, V.A.; KARPOV, G.V.

Experience in constructing a thermal pump. Nauch.-tekhn. inform.  
biul. LPI no.10:58-67 '58. (MIRA 14:3)  
(Heat pumps)

BOBROV, V.M.; VORONOV, A.A.; GLEBOV, I.A.; IVANOV, V.I.; KARPOV, G.V.;  
KASHTELYAN, V.Ye.; SEMENOV, V.V.; SIROTKO, V.K.; SIRTY, N.S.;  
SUKHANOV, L.A.; URUSOV, I.D.; FETISOV, V.V.; FOMINA, Ye.N.;  
KOSTENKO, M.P., akademik, red.; DOLMATOV, P.S., red.izd-va;  
SMIRNOVA, A.V., tekhn.red.

[Electrodynamic modeling of power engineering systems] Elektro-  
dinamicheskoe modelirovanie energeticheskikh sistem. Pod red.  
M.P.Kostenko. Moskva, 1959. 406 p. (MIRA 13:2)

1. Akademiya nauk SSSR. Institut elektromekhaniki.  
(Electric networks--Electromechanical analogies)

[illegible]